

**PECO ENERGY COMPANY
STATEMENT NO. 1**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION
v.
PECO ENERGY COMPANY – GAS DIVISION

DOCKET NO. R-2022-3031113

DIRECT TESTIMONY
PUBLIC VERSION

WITNESS: RONALD A. BRADLEY

SUBJECT: PECO’S GAS OPERATIONS; OVERVIEW
OF PECO’S RATE FILING; PECO’S
CAPITAL INVESTMENT PROCESS;
SYSTEM SAFETY AND RELIABILITY;
FULFILLMENT OF PRIOR RATE CASE
OBLIGATIONS; MANUFACTURED GAS
PLANT REMEDIATION PROGRAM;
ENHANCEMENT OF QUALITY OF
SERVICE AND SUPPORT FOR ECONOMIC
DEVELOPMENT

DATED: MARCH 31, 2022

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1 I am also an active member of several industry leading organizations. I have been
2 an active member of the Board of Directors of the Northeast Gas Association
3 since 2009 and was most recently elected as the 2022 Chairman of the Board
4 where I support the advancement of education and training, technology, research
5 and development, operations, planning, and increasing public awareness of
6 natural gas in the northeast region of the United States. Since 2008, I have served
7 as a Member of the Executive Committee for Operations Management for the
8 American Gas Association. Additionally, since 2009, I have served on the
9 Pennsylvania Energy Gas Board and was most recently elected as the 2022
10 Chairman of the Board where I represent and promote the interests of regulated
11 natural gas distribution companies in Pennsylvania. Beginning in 2018, I have
12 served on the Technical Pipeline Safety Standards Committee providing advice to
13 the Secretary of the United States Department of Transportation pertaining to the
14 execution of 49 U.S.C. Chapter 601, Pipeline Safety.

15 **4. Q. What is the purpose of your testimony?**

16 A. The purpose of my testimony is to: (1) generally describe PECO's gas
17 operations; (2) provide an overview of PECO's request for rate relief and the
18 testimony filed in support of that relief; (3) explain PECO's capital investment
19 process and identify, by major plant category, PECO's claimed future test year
20 ("FTY") and fully projected future test year ("FPFTY") plant additions; (4)
21 discuss the Company's actions to ensure the safety and reliability of PECO's gas
22 distribution system; (5) briefly describe PECO's fulfillment of obligations from
23 the Company's most recent base rate proceeding; (6) support the claim for

1 manufactured gas plant (“MGP”) remediation expense; and (7) describe various
2 initiatives launched by PECO to enhance customer service, community support
3 and economic development, and protect and preserve the environment and to
4 explain why, pursuant to Section 523 of the Public Utility Code, PECO’s superior
5 management performance justifies a higher return on equity (“ROE”) as
6 recommended by PECO Witness Paul R. Moul (PECO Statement No. 5).

7 II. DESCRIPTION OF GAS OPERATIONS

8 **5. Q. Please provide an overview of PECO’s gas operations.**

9 A. PECO provides natural gas service to over 543,000 retail customers and provides
10 transportation service to 676 unique large commercial and industrial customers,
11 who may have multiple accounts. PECO’s natural gas service region is located
12 throughout a 1,900 square-mile area in southeastern Pennsylvania adjacent to, but
13 exclusive of, the City of Philadelphia. The Company’s gas service territory
14 comprises all or portions of Bucks, Chester, Delaware, Montgomery and
15 Lancaster Counties and includes a total population served of approximately 2.6
16 million people.

17 **6. Q. What services does PECO offer its gas customers?**

18 A. PECO makes available both bundled and unbundled natural gas service. Most of
19 our customers have elected a bundled service, whereby PECO procures and
20 delivers gas to their home or place of business. With the advent of transportation
21 service in the 1980s and the passage of the Natural Gas Choice and Competition
22 Act in 1999, customers also have the option to procure their own gas supply and

1 pay PECO for delivery service only. In addition, and as set forth in our gas tariff,
2 qualifying customers can avail themselves of a variety of firm, interruptible and
3 temperature-controlled services.

4 **7. Q. How does PECO’s customer base break down by major customer**
5 **classification?**

6 A. As of December 31, 2021, PECO served approximately 497,800 residential
7 customers; approximately 44,800 small commercial and industrial customers; and
8 676 unique large commercial and industrial customers. Residential customers
9 account for nearly 46% of total metered volume.

10 **8. Q. What are the major assets and facilities that PECO utilizes to provide gas**
11 **service to its customers?**

12 A. The natural gas PECO delivers to its customers is procured through contracts with
13 third-party suppliers. PECO transports and stores gas for its customers on six
14 interstate pipelines. PECO has direct interconnects on its distribution system with
15 three of these interstate pipelines. To supplement that supply on an as-needed
16 basis during peak-demand periods, PECO operates a liquefied natural gas
17 (“LNG”) plant in West Conshohocken and a propane-air peaking plant in Chester.
18 In the last seven years, PECO has invested in two new portable vaporizers, three
19 LNG transport trailers, two portable storage tanks, and off-loading facilities built
20 to handle LNG transport trailers that are located at the West Conshohocken gas
21 plant, East Greenville Gate Station, and Parkesburg Gate Station. PECO has also
22 commissioned two new boil off compressors at the West Conshohocken gas plant

1 which will increase the reliability and efficiency of the boil off system. In
2 anticipation of increased demand, and in order to preserve the reliability of the gas
3 system, PECO has been working on establishing a natural gas reliability station in
4 Marple Township along with the installation of 11.5 miles of new natural gas
5 main and upgrades to the West Conshohocken gas plant. The natural gas
6 reliability station will act as a new conduit to supply the majority of Delaware
7 County with gas from PECO's LNG plant in order to support the growing demand
8 in that area. In addition to its supply and storage facilities, PECO operates
9 approximately 7,000 miles of low-, medium-, high-, and over-high-pressure gas
10 mains, 460,000 gas service lines and 28 gate stations that feed its distribution
11 system. PECO's purchased gas costs are recovered through a separate Section
12 1307(f) rate mechanism, which is reviewed and reconciled annually. Those costs
13 are not part of the increase requested by this filing.

14 **9. Q. How does PECO staff its gas operations?**

15 A. At the end of the FPFTY, PECO projects that 391 employees will be engaged
16 full-time on gas operations within the Gas Department. Of that number, 356 will
17 be involved in the physical operation of the gas system, including the design,
18 installation and replacement of mains and other facilities; the operation and
19 maintenance of PECO's LNG plant, propane-air peaking plant and gas gate
20 stations; damage prevention and safety; and regulatory compliance. The
21 Company hosts a Gas Mechanics School to develop a hiring pool for gas
22 operations personnel. Most recently, the Company hosted a Gas Mechanics
23 School in September of 2021 and hired all 20 graduating individuals. Interest in

1 gas operations positions is high, with the Company receiving 359 applications for
2 20 openings in the Fall of 2021. The Company intends to host additional Gas
3 Mechanics Schools in May and October of 2022 and plans to again hire 20 new
4 mechanics from each session. PECO currently has received 641 applications for
5 the upcoming May 2022 school.

6 Another thirty-five employees will be engaged on the administrative side of the
7 business, including contract controls administration; planning and reporting; and
8 the representation of PECO in proceedings before the Pennsylvania Public Utility
9 Commission (“PUC” or “Commission”) and the Federal Energy Regulatory
10 Commission (“FERC”).

11 Other departments within PECO that support the gas business include Legal,
12 Regulatory and External Affairs, Distribution System Operations, Technical
13 Services and Customer Operations, to name a few examples, and will contribute
14 an estimated 309 employees for the benefit of the gas business. In addition, and
15 as discussed in greater detail by Mr. Robert J. Stefani (PECO Statement No. 2),
16 PECO takes advantage of various support services (e.g., finance and accounting,
17 supply, legal, corporate governance, and information technology) offered by the
18 Exelon Business Services Company (“EBSC”).

19 III. OVERVIEW OF RATE FILING

20 **10. Q. Please summarize the relief that PECO is requesting through this rate filing.**

21 A. PECO is seeking an increase in its annual gas operating revenues of \$82.1
22 million, or 8.8% on a total retail revenue basis. We have proposed an effective

1 date of May 30, 2022, but recognize that our filing will likely be suspended and
2 investigated.

3 **11. Q. Why is PECO requesting a rate increase at this time?**

4 A. As further discussed by Mr. Stefani and Mr. Michael J. Trzaska (PECO Statement
5 No. 3), the Company's base rates are no longer sufficient to provide a reasonable
6 return on our ongoing investment in the facilities required to provide our
7 customers the safe and reliable service they have come to expect. In short, we
8 continue to invest in new and replacement plant and our costs continue to rise,
9 without sufficient revenue to support necessary investments and customer
10 services.

11 **12. Q. What steps has PECO taken to constrain increases in the cost of providing
12 gas service?**

13 A. As discussed by Mr. Stefani, since the Company's last gas base rate case, PECO
14 has carefully managed its operation and maintenance ("O&M") expenses. PECO
15 projects that the compound annual growth rate ("CAGR") in O&M expense from
16 2021 through the end of the FPFTY will be 2.8%. This continues PECO's long-
17 term favorable CAGR and is well below recent inflationary trends. When the
18 Company's projected December 2010 to December 2023 CAGR is adjusted for

1 increases in gas mapping¹ and locate expenses², which are prudently incurred but
2 largely beyond the Company's control, the projected CAGR in O&M expense
3 decreases further to 1.7%. That rate is well below the expected inflation CAGR
4 for the same period.

5 Gas Operations continues to implement several other initiatives that contribute to
6 the reduction of operating costs and increase the safety of the distribution system.
7 For example, the Company's accelerated replacement programs outlined in
8 PECO's Gas Long Term Infrastructure Improvement Plan ("LTIIIP") retire aging
9 gas mains and services, reduce the incoming leak volume (i.e., the number of new
10 confirmed leaks) and enable crews to implement more capital replacement and
11 new customer projects. In addition, as I discuss later in my testimony, PECO is in
12 the process of implementing an expanded Pipeline Safety Management System
13 ("PSMS").

14 PECO also leverages new and existing technologies to minimize disruption to
15 local roads and properties and thereby reduce restoration cost and the time
16 required to restore roads to full service. Examples of such efforts include:
17 directional drilling equipment to eliminate the need to open trenches and to
18 increase overall productivity; camera equipment to investigate pipeline interiors
19 and pinpoint corrective maintenance, reducing both the number of street openings

¹ Gas mapping expenses are incurred in support of the Company's gas mapping project which began in 2017 as part of the settlement agreed to in Docket No. C-2015-2479970. The project involves implementing mapping system enhancements that will allow PECO to map and locate its facilities with sub-foot accuracy.

² Locate expenses are incurred in response to PA One Call requests to locate and mark PECO's underground facilities. The volume of locate tickets has increased approximately 80% from 2010 to 2021, including a 10% increase from 2019 to 2021.

1 required and cost of restoration; the utilization of a bolt-on tee removal tool which
2 eliminates the need to replace whole sections of main when a potentially
3 hazardous bolt-on service tee is identified; and facility locating equipment like
4 vacuum excavation to further assist in pinpointing our facilities and reducing the
5 potential for damage while excavating.

6 **13. Q. Please identify the other witnesses providing direct testimony on behalf of**
7 **PECO in this proceeding.**

8 A. In addition to myself, the following witnesses will be responsible for presenting
9 PECO's case-in-chief:

10 **Robert J. Stefani** (PECO Statement No. 2) is Senior Vice President, Chief
11 Financial Officer and Treasurer at PECO. Mr. Stefani provides an overview of
12 PECO's principal accounting exhibits; discusses PECO's budgeting process;
13 explains and supports PECO's gas sales forecast; and describes the services that
14 PECO receives from affiliated entities and the estimated cost of those services
15 during the FTY and FPFTY.

16 **Michael J. Trzaska** (PECO Statement No. 3) is a Principal Regulatory and Rates
17 Specialist at PECO. Mr. Trzaska sponsors PECO Exhibits MJT-1, MJT-2 and
18 MJT-3, which set forth PECO's revenue requirement for the FPFTY ending
19 December 31, 2023, FTY ending December 31, 2022, and historic test year
20 ("HTY") ended December 31, 2021, respectively. He specifically supports
21 PECO's measures of value, revenue, operating expense and tax claims.

1 **Caroline Fulginiti** (PECO Statement No. 4) is the Director of Accounting at
2 PECO. Ms. Fulginiti describes PECO’s accounting processes; supports the
3 assignment and allocation of common costs between PECO’s electric and gas
4 operations; and explains the development of the depreciated original cost of the
5 Company’s utility plant in service and its claim for annual depreciation expense.

6 **Paul R. Moul** (PECO Statement No. 5) is the Managing Consultant of P. Moul &
7 Associates, Inc. Mr. Moul presents testimony concerning the rate of return that
8 PECO should be afforded an opportunity to earn on its measures of value. He
9 supports PECO’s claimed capital structure ratios, its embedded costs of debt, and
10 its requested equity allowance.

11 **Jiang Ding** (PECO Statement No. 6) is a Principal Regulatory and Rates
12 Specialist at PECO. Ms. Ding presents an unbundled, fully allocated, customer
13 class cost-of-service study (“COSS”).

14 **Joseph A. Bisti** (PECO Statement No. 7) is a Principal Regulatory and Rates
15 Specialist at PECO. Mr. Bisti presents PECO’s proposed tariff rates and explains
16 how the results of Ms. Ding’s COSS, as well as the consideration of other factors,
17 were utilized in the rate design process.

18 **Benjamin S. Yin** (PECO Statement No. 8) is the Director of Regulatory Strategy
19 and Revenue Policy at PECO. Mr. Yin discusses proposed changes and
20 clarifications to PECO’s gas service tariff.

1 **Doreen L. Masalta** (PECO Statement No. 9) is the Director of Energy and
2 Marketing Services at PECO. Ms. Masalta describes the Company’s proposed
3 enhancements to its residential and low-income gas energy efficiency programs.

4 **Kelly Colarelli** (PECO Statement No. 10) is the Director of Customer Financial
5 Operations at PECO. Ms. Colarelli discusses PECO’s expanded outreach and
6 education plans to better serve and reach our low-to-moderate-income customers,
7 a proposal to increase the budget for PECO’s gas Low-Income Usage Reduction
8 Program (“LIURP”), a proposed extension of PECO’s existing small commercial
9 gas customer grant program, and a new Gas Customer Safety Program.

10 **IV. PECO’S CAPITAL INVESTMENT PROCESS**

11 **14. Q. How does PECO determine its annual capital investment requirements?**

12 A. PECO’s capital investment plan begins with a detailed budgeting and long-range
13 plan (“LRP”) development process. A key goal of that process is to integrate and
14 align capital investments with PECO’s strategic operational, regulatory and
15 financial plans. The mix of capital investment needs can change from year to
16 year and is the product of a variety of factors, including trends in the housing
17 market, emergent operational constraints, local municipality workloads and, most
18 importantly, the condition of existing facilities. Annual capital investment
19 requirements are evaluated on a functional level and are primarily placed into one
20 of four categories: system performance, capacity improvement, facility relocation,
21 or new business.

1 **System performance projects** are evaluated based upon factors specific to the
2 appropriate replacement program and then prioritized for replacement in a given
3 year. These projects target aging infrastructure based on field observations and a
4 review of program-specific performance metrics. Projects are ranked within their
5 respective programs based on certain criteria including but not limited to: age of
6 main, repaired leaks/breaks, main pressures, active leaks, customer complaints,
7 cost to replace versus cost to repair, condition of main, and environmental factors.

8 **Capacity improvement projects** prevent system pressure from dropping below
9 design standards and relieve capacity constrained areas which prevent the addition
10 of new customers.

11 **Facility relocation projects** move gas facilities away from conflicting township
12 and state road improvements.

13 Finally, **new business projects** support residential and commercial customer
14 requests for new gas service, an upgrade of existing service and the relocation of
15 gas facilities.

16 Projects requiring a capital investment of over \$1.5 million (“Major Projects”) are
17 subject to an additional, rigorous review committee process which includes senior
18 management control of project scope and contract strategy. The primary goals of
19 the process are to ensure that: (1) the technical merits of each Major Project are
20 balanced with the economic benefits and goals of the Company; (2) Major
21 Projects are properly researched, developed, planned, reviewed, and authorized by
22 senior management before significant resources are committed or expended; and

1 (3) decision points for consideration and approval of any additional funds are
2 established as the details of Major Projects evolve.

3 All of these capital investment processes work together to ensure that PECO's
4 investments fully support safety, reliability and customer service goals as well as
5 achieve an optimal operational efficiency.

6 PECO's FTY and FPFTY plant additions are itemized by functional area and by
7 FERC account in PECO Statement No. 3, the direct testimony of Michael J.
8 Trzaska, Exhibit MJT-2, Schedule C-2, and MJT-1, Schedule C-2, for the FTY
9 and FPFTY, respectively.

10 **15. Q. Has PECO invested capital in accordance with the 2021 budget presented in**
11 **PECO's last gas base rate proceeding (Docket No. R-2020-3018929)?**

12 A. The Company spent \$37.1 million *over* the 2021 budget, on a calendarized basis,
13 that was presented in 2020 gas base rate proceeding. Some of these expenditures
14 are not yet reflected in plant additions due to permitting delays. The Company
15 continues to work to place these assets in service for the benefit of its customers.

16 **16. Q. In your opinion, is all of the plant that PECO has included in its rate base**
17 **claim needed in order to provide safe and reliable gas service?**

18 A. Yes, it is.

1 lead time to address an emerging issue before it becomes detrimental to safety.
2 For example, PECO's mobile leak survey interval of once per calendar year
3 related to outmoded mains exceeds the code-required interval of once every three
4 years. Additionally, PECO performs leak surveys for all distribution main
5 operating above 99 pounds per square inch gauge of pressure six times per
6 calendar year instead of the code-required frequency of once every five years.
7 PECO also exceeds code requirements in execution of transmission leak surveys,
8 which are performed 6 times per year compared to the code-required once per
9 calendar year.

10 These preventative maintenance tasks help ensure that PECO's gas system
11 continues to operate safely and reliably. If and when emergent situations are
12 uncovered, PECO is able to provide a rapid response to address the situation.
13 When a permanent solution is not immediately available, corrective maintenance
14 tasks make the situation safe and allow for the proper time to plan and implement
15 a permanent solution.

16 As part of the Risk Management element of the PSMS, the Company regularly
17 reviews and assesses many factors affecting its distribution system to identify risk
18 and determine the best mitigation strategy. This includes implementation of the
19 Company's Distribution Integrity Management Program ("DIMP"), which
20 provides a rigorous framework for analyzing, ranking and mitigating threats to
21 PECO's entire distribution system. Data obtained via preventative and corrective
22 maintenance tasks is incorporated into the DIMP, allowing PECO to assess which
23 asset categories are in need of threat mitigation. PECO analyzes data throughout

1 the year for emerging threats and incorporates the analysis results and
2 corresponding increased mitigative actions, if required, into the next revision of
3 the DIMP.

4 **18. Q. Can you describe the various programs associated with PECO's long term**
5 **threat management?**

6 A. PECO has long term threat mitigation programs associated with gas services and
7 gas mains. PECO has approximately 465,397 total gas services on its system and,
8 as of the end of 2021, 5,442 of those services are composed of bare steel. PECO
9 has committed to replacing all bare steel services with either plastic or coated
10 steel by the end of 2022 and is currently on track to meet that commitment.

11 Out of PECO's 6,967.5 miles of gas main on its system as of the end of 2021,
12 218.9 are composed of bare steel and 522.9 are composed of cast, ductile or
13 wrought iron. Of those mains composed of bare steel, PECO has committed to
14 replacing all mains that are 8" in diameter or less by the end of 2030 while
15 replacing all bare steel mains greater than 8" in diameter and all cast, ductile and
16 wrought iron mains by the end of 2035. PECO leverages a compilation of main
17 replacement programs in order to achieve these commitments.

18 PECO's main replacement programs are categorized as either baseline or
19 accelerated programs. PECO's baseline main replacement programs account for
20 approximately 15 miles of main replacement each year. These programs are
21 driven by field observations obtained during routine preventative maintenance as
22 well as from feedback from corrective maintenance of specific assets.

1 PECO’s accelerated main replacement programs are geared toward assets with a
2 history of field indications suggesting that asset replacement will soon be
3 necessary but that have not been identified as needing replacement under a
4 baseline program. The accelerated main replacement programs are prioritized by
5 a number of factors including field observations, asset class DIMP scoring,
6 customer satisfaction, third party construction, municipal coordination, and
7 proposed paving/paving moratorium. PECO replaces approximately 40 miles of
8 main annually under accelerated programs which when combined with baseline
9 programs averages out to approximately 51 miles of main replacement annually.

10 **19. Q. Does the Company have a program to address cybersecurity risks?**

11 A. Yes. PECO has programs to address cybersecurity risks and, along with its
12 Exelon sister utilities, is working to implement an Operational Technologies
13 (“OT”) Security Governance Program to enhance existing cybersecurity
14 measures. The Program has created documentation on how to properly identify
15 and categorize OT assets and has developed an associated inventory of OT assets
16 currently on its system. The Program has also developed procedures to identify
17 the specific cyber threat vulnerability for the asset inventory and the associated
18 data connections as well as remediation and mitigation strategies to protect
19 PECO’s interconnected system. Procedures have also been developed to manage
20 access administration, data at rest and in transit between devices, and the
21 sanitation and decommissioning of OT assets at their end of life. Safeguards have
22 been put into effect for firewall utilization and malicious code detection. As part
23 of this Program, PECO will be implementing a transient cyber asset in 2022 – a

1 disconnected system which scans and validates that new data intended to integrate
2 with internal systems is free of malicious code, allowing PECO's OT assets to
3 remain in a completely disconnected environment.

4 **20. Q. What recent enhancements has PECO implemented to improve the safety**
5 **and reliability of its gas distribution operations?**

6 A. PECO has implemented a number of important initiatives and technological
7 improvements focused on safety and reliability.

8 **Post Construction Quality Audits for all Contractors.** Since 2018, the
9 Company has conducted post construction quality audits and random dig ups of
10 all line of work for all PECO contractors. The post construction quality audits are
11 overseen by PECO personnel for new work completed in the previous 30 days.
12 Any identified defects are repaired immediately by the contractor and at the
13 contractor's expense. In 2021, PECO conducted 1,149 post-construction dig-ups
14 with over 14,000 observations. Between 2018 and 2021, PECO has seen a 78%
15 decline in the percentage of observations that identify a defect or condition that
16 may impact the reliability of the gas distribution system or cause damage to the
17 system (from 3.3% in 2018 to 0.72% in 2021).

18 **Mapping Enhancements.** The Company is actively enhancing its mapping
19 system through an initiative called GE SmallWorld. The installation of GE
20 SmallWorld will replace the current Geographic Information System ("GIS") and
21 will provide enhanced capabilities including geographic planning and as-building
22 of work (i.e., incorporating drawings of projects as they are completed) and better

1 integration with other external systems. GE SmallWorld is expected to be fully
2 installed by 2024. Through this initiative and others, our field employees will
3 now have the ability to enter data into mapping products during main and service
4 replacement, leak repairs, new construction and any other process where pipe is
5 exposed. The integration of mobile and geospatial technologies will generally
6 improve the Company's ability to locate and track gas distribution facilities.

7 **Dispatch and Field Reporting.** PECO has started implementation of the
8 OneMDS initiative which will redefine how field employees receive work, access
9 information and capture data in the field. OneMDS will streamline the
10 Company's dispatch and field reporting capabilities via a mobile experience
11 accessible on secure mobile devices. Some key benefits include improved data
12 records through electronic data capture and an interactive mapping tool with the
13 functionality to create work orders. The OneMDS initiative is expected to deploy
14 in two phases. The first phase will become functional in the second quarter of
15 2023 and will include the ability to capture data electronically. The second phase
16 will become functional in the second quarter of 2024 and include an interactive
17 mapping tool with the functionality to create work orders. This phase will
18 coincide with the conversion of the Company's GIS system, which will feed the
19 interactive mapping tool.

20 **Marker Ball Utilization.** PECO utilizes marker balls, which are buried
21 alongside underground facilities, to provide an accurate, convenient and long-
22 lasting means to identify specific locations on PECO's gas distribution system,
23 including valves, dead ends, leaks, or places where pipe changes directions. To

1 date PECO has installed over 106,000 marker balls on its system for use in
2 assisting in the locating of various facilities.

3 **Prevention of Cross-Boring.** As part of projects that utilize trenchless
4 technologies, PECO has implemented improved measures to avoid occurrences of
5 incidental cross-boring with another existing utility. The Company locates and
6 exposes all utility facilities within the boring pathway, including laterals, prior to
7 initiating boring activity. PECO also performs a camera inspection of relevant
8 sewer laterals before and after boring activity, as appropriate.

9 **Ongoing Reliability Project.** The Company is continuing work on a natural gas
10 reliability project in Delaware and Montgomery counties to meet the growing
11 needs and demands of our customers. The project includes: (1) installing 11.5
12 miles of over high-pressure gas main; (2) installing a natural gas reliability
13 station; and (3) upgrading PECO's natural gas plant infrastructure in West
14 Conshohocken. PECO has installed 99% of the 11.5 miles of over high-pressure
15 gas main, 99% lateral connection between the West Conshohocken Gas Plant and
16 the adjacent gas station and completed 65% of the West Conshohocken Gas Plant
17 upgrades. Once complete, the upgrades at the West Conshohocken gas plant will
18 increase the plant's output and reinforce gas supply as needed during peak-
19 demand periods. PECO experienced a delay in the original timeline associated
20 with this project due to permitting challenges, which were eventually resolved by
21 a March 2022 ruling by the Commission permitting PECO to utilize its originally
22 proposed project location for the construction of the Marple reliability station. In
23 light of the Commission's favorable ruling, PECO now expects to have the

1 reliability station completed by the end of 2022 and achieve an in-service date of
2 both the gas main and reliability station in the first quarter of 2023. The
3 remainder of the work at the West Conshohocken LNG plant, which is heating-
4 season sensitive, will take place in 2023 with an expected total project completion
5 date of December 2023.

6 **Adelphia Interconnection.** In the second quarter of 2022, PECO will be
7 interconnecting with a new supplier, Adelphia, at the Tilghman Street Gate
8 Station. The interconnection provides flexibility of supply to one of PECO's
9 largest single customers, Kimberly Clark, as well as redundancy of service via
10 diversity of suppliers for the general distribution system fed from that gate station.

11 **21. Q. In your opinion, has PECO been successful in ensuring system safety and**
12 **reliability?**

13 A. Yes. Between preventative maintenance activities, the accelerated investment in
14 the replacement of potentially hazardous capital assets and the utilization of the
15 enhancements mentioned above, PECO continues to improve on its performance
16 in both safety and reliability. Examples where this is evident are:

17 **Bare Steel Service Replacement.** PECO's initial LTIIP filing in 2011 set the
18 goal of replacing all bare steel services by the end of 2022 and PECO is on track
19 to complete that goal.

20 **Incoming Leak Reduction.** PECO has also been replacing outmoded (i.e., cast
21 iron and unprotected bare steel) mains on an accelerated basis pursuant to the

1 Company's LTIIP and has seen a 36% reduction in incoming 1, 2A, and 2B leaks
2 since the 2015 filing of the first modification of the LTIIP. See PECO Exhibit
3 RAB-1.

4 **Gas Damage Rate.** Within the last five years, 2017 through 2021, PECO has
5 experienced a general decline in damage occurrences with respect to the number
6 of one-call locate tickets received, each of which is a potential damage case. Gas
7 underground damages per 1,000 requests decreased from a rate of 2.52 in 2017 to
8 1.94 in 2021. Likewise, the third-party damage rate decreased from 2.15 in 2017
9 to 1.76 in 2021 and gas damages due to print error (i.e., mapping error) have
10 dropped from .91 in 2017 to .67 in 2021. All of these positive trends, displayed
11 on an annual basis below, are attributed to PECO's increased focus on its damage
12 prevention program and on PECO's Gas Mapping Program initiative.

Metric	2017	2018	2019	2020	2021
Gas Underground Damages (Damages/1000 Requests Rate)	2.52	2.20	2.15	2.26	1.94
3rd Party Damages Rate	2.15	1.87	1.82	1.89	1.76
Gas damages due to print errors-rate	0.91	0.78	0.83	0.87	0.67

13
14 **Gas Odor Response.** PECO's odor response rate has remained in the top quartile
15 for the last 16 years among similar gas utilities per industry benchmarking. See
16 PECO Exhibit RAB-2. In 2021, the Company successfully responded to 20,383

1 gas odor calls, with only four odors exceeding the industry metric of a 60-minute
2 response time.

3 **VI. FULFILLMENT OF OBLIGATIONS FROM THE**
4 **MOST RECENT GAS BASE RATE PROCEEDING**

5 **22. Q. In PECO’s last gas base rate proceeding (Docket No. R-2020-3018929), the**
6 **Commission’s Final Order (the “2020 Gas Order”) established several**
7 **directives for the Company. Has the Company satisfied or taken steps to**
8 **satisfy those directives?**

9 A. Yes, it has.

10 **23. Q. The 2020 Gas Order required PECO to provide the Commission’s Bureau of**
11 **Technical Utility Services (“TUS”) and Bureau of Investigation and**
12 **Enforcement (“I&E”) with an update to PECO Exhibits MJT-1 and MJT-2,**
13 **Schedule C-2, no later than October 31, 2021, including actual capital**
14 **expenditures, plant additions, and retirements by month from July 1, 2020**
15 **through June 30, 2021. Has PECO provided this update?**

16 A. Yes. The Company provided the updated information to TUS and I&E on
17 October 29, 2021.

1 **24. Q. The Company is also required to provide an additional update comparing**
2 **projected additions and retirements with actual additions and retirements**
3 **through June 30, 2022, no later than October 1, 2022. Is PECO addressing**
4 **this requirement?**

5 A. Yes, the Company is tracking plant additions and retirements and intends to
6 provide a timely update to TUS and I&E.

7 **25. Q. The 2020 Gas Order noted PECO’s agreement to host a collaborative**
8 **meeting to discuss the coordination of the Company’s gas energy efficiency**
9 **and conservation (“EE&C”) program with other services for low-income**
10 **customers. Did PECO host a collaborative?**

11 A. Yes, as explained by PECO witness Doreen L. Masalta (PECO Statement No. 9),
12 PECO hosted a collaborative on December 2, 2021. The Company presented
13 stakeholders with information about the eligibility requirements and benefits of
14 the new natural gas Safe and Efficient Heating Program for low-income
15 customers. PECO received positive feedback about the Company’s dedication of
16 the EE&C funding increase approved in the 2020 Gas Order to this new Program.

1 **26. Q. The Company also agreed to: (1) track commercial EE&C expenses against**
2 **the \$28,000 annual budget and report such expenses in the Company’s next**
3 **gas base rate case filing; and (2) make a pro forma adjustment to the GC**
4 **revenue requirement in the next gas rate case. Has the Company satisfied**
5 **these commitments?**

6 A. Yes, the Company has been tracking commercial EE&C expenses against the
7 \$28,000 annual budget and reported the expenses in this filing. PECO has also
8 made a pro forma adjustment to the GC revenue requirement as shown in Exhibit
9 Schedule D-14 of PECO Exhibit MJT-1.

10 **27. Q. The 2020 Gas Order approved the Company’s proposal to pay interest on**
11 **the monthly balance of MGP funds that are not yet spent on remediation**
12 **activities at the residential mortgage lending rate specified by the Secretary**
13 **of the Pennsylvania Department of Banking and Securities after July 1, 2021,**
14 **when new rates took effect. Has the Company satisfied this requirement?**

15 A. Yes. As explained by PECO witness Michael J. Trzaska in Statement No. 3,
16 PECO has applied the accrued interest on unspent MGP funds for \$281,000 to
17 reduce the Company’s distribution revenue requirement.

1 28. Q. [START CONFIDENTIAL] [REDACTED]

2 [REDACTED]

3 [REDACTED]

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[REDACTED]

[END CONFIDENTIAL]

1 **30. Q. The 2020 Gas Order approved PECO’s proposal to eliminate the Rate IS**
2 **sharing mechanism on or before December 1, 2021, as part of the Company’s**
3 **next annual Purchased Gas Cost (“PGC”) reconciliation filing. Has the**
4 **Company satisfied this requirement?**

5 A. Yes. The December 1, 2021 PGC includes IS profits through November 30,
6 2021. *See* Docket No. R-2021-3025629. Once reconciliation of IS profits prior to
7 November 30, 2021 is complete, the PGC will no longer reflect any IS profits.

8 **31. Q. The 2020 Gas Order noted the Company’s agreement to modify PECO’s**
9 **budgetary cost allocation procedures to distribute Distribution System**
10 **Improvement Charge (“DSIC”)-eligible costs among the rate classes based**
11 **on total base rate revenues. Has the Company addressed this commitment?**

12 A. Yes, this was corrected in the Company’s budget process.

13 **32. Q. Has PECO developed a framework to update the competitive alternative**
14 **analysis for negotiated gas contracts that have not had their competitive**
15 **alternative verified for a period of five years or more upon filing a new base**
16 **rate case, as directed by the Commission in the 2020 Gas Order?**

17 A. Yes. In his direct testimony (PECO Statement No. 7), Company witness Joseph
18 A. Bisti describes the updated competitive alternative analysis framework for the
19 four customers with negotiated gas rates who fit this profile.

1 **VII. MANUFACTURED GAS PLANT REMEDIATION PROGRAM**

2 **33. Q. Please discuss the Company’s program to remediate former manufactured**
3 **gas plant sites and its FTY and FPFTY claims for the cost of that program.**

4 A. PECO has undertaken positive efforts to eliminate potential environmental
5 concerns at its former MGP sites. At one time, these sites were used to
6 manufacture gas from coal for distribution to customers on the PECO gas system,
7 but they later became unnecessary following construction of the interstate natural
8 gas pipeline system. The sites are geographically dispersed around our service
9 territory and need to be remediated to certain specifications established by the
10 Pennsylvania Department of Environmental Protection (“PADEP”). Once
11 remediated, the sites may be used for various beneficial land-use purposes that
12 otherwise would not be permitted. It is our intention to achieve regulatory closure
13 with PADEP for 24 of the 26 presently identified MGP sites by the end of 2023.
14 Due to issues regarding obtaining site access, the timeframe for the remediation of
15 the remaining two sites cannot be projected. To date, we have closed out the
16 remediation of 19 of the sites and closed, in part, another site.

17 Since 2010, we have spent, on average, \$5.1 million per year for MGP
18 remediation. The Company expects to spend approximately \$18.7 million over
19 the next ten years (2021-2031) and a total of \$20.3 million through 2043 on MGP
20 remediation.

1 **VIII. QUALITY OF SERVICE, COMMUNITY SUPPORT**
2 **AND ECONOMIC DEVELOPMENT**

3 **34. Q. What efforts have been made by the Company in recent years to enhance the**
4 **quality of its customer service?**

5 A. The Company has undertaken several initiatives to improve its customer service.
6 Building upon prior efforts to enhance the Company’s website, PECO recently
7 included an AI Chatbot option to provide customers with a new avenue to access
8 additional resources. The Company is currently working on rolling out the Live
9 Chat feature of the Chat option which will allow customers to interact directly
10 with a live agent. PECO is also in the process of implementing multifactor
11 authentication for its My Account login to provide a secure login and better
12 protect the confidential information of customers. To ease rental property
13 transitions for property managers, PECO created a Property Manager Portal to
14 facilitate service shut-offs during periods when properties are vacant.

15 Over the past several years, the Company expanded its communications
16 capabilities so customers can interact with the Company using mobile devices.
17 PECO’s mobile application has features such as slide-to-pay (by credit card and e-
18 check), outage reporting, and the ability to enroll in electronic billing, automatic
19 payments, and budget billing. PECO also created a feature on its mobile
20 application called I Sign-Up & Move (“ISUM”), which allows both residential
21 and commercial customers to make changes to their account status and service
22 needs automatically through the mobile application.

1 Finally, the Company remains focused on how customers interact with its
2 Customer Care Center (i.e., PECO's call center). PECO staffs its Customer Care
3 Center to ensure customer demands are met and invests in training programs to
4 improve agent skills on an ongoing basis.

5 Activities in the Customer Care Center include the following:

- 6 • Enabling the Company's call center agents to work remotely from home.
7 This capability has been used during the COVID-19 pandemic and also
8 allows additional call center agents to be available for storm response
9 during especially hazardous weather conditions, thereby reducing the wait
10 times of customers assisted by agents physically located in PECO's
11 Customer Care Center.
- 12 • Measuring customer satisfaction with Customer Care agents via post-call
13 surveys. Customers consistently provide high ratings for our Customer
14 Care agents. Approximately two-thirds of customers indicated their
15 expectations were exceeded in both 2020 and 2021, and the overwhelming
16 majority (approximately 95%) had their expectations met or exceeded.
- 17 • The Customer Care Center employs approximately 9 bilingual Spanish-
18 speaking agents, who can be more responsive to Spanish-speaking
19 customers than non-Spanish-speaking agents. PECO's Spanish-speaking
20 agents assisted approximately 5,447 customers in Spanish in 2020 and
21 approximately 6,565 customers in Spanish in 2021.

- PECO is working to transition from the current interactive voice response (“IVR”) system to a push button and natural language technology which will provide a more seamless and personal interaction when calling PECO.
- Beginning in the summer of 2021 through the first quarter of 2022, the Company is conducting trainings to improve the customer experience and resolve customer questions during the first call with a customer (“First Call Resolution” or “FCR”). In addition, the Company is expanding its FCR efforts by re-examining the processes that drive repeat calls and making modifications to remove or minimize the need for multiple communications. PECO has also moved all agents to a common switch line, thus minimizing transfers for the customer. Finally, as part of this training initiative, the Company is examining additional opportunities to enhance communications with customers, such as automated e-mails or texts to provide customers with status updates on pending applications, payments or other requisitions.

35. Q. Have these enhancements helped PECO improve its performance in the area of customer service?

A. Yes, they have. The effectiveness of PECO’s approach to customer service is reflected in the fact that the Company continues to experience improvements in customer ratings over its 2019 performance:

Metric	2019	2021
PECO's Overall Call Center Satisfaction Index	8.18	8.35
J.D. Power Gas Rating	748	760
Overall Call Center Satisfaction	85.8%	88.3%

1 Additionally, in 2020 through 2021 PECO also achieved 667 days of responding
2 within 60 minutes to a gas odor call and continues to be a leader in performance
3 in this area. PECO continues to answer calls with an average speed of 14 seconds
4 and operates with an abandoned rate of 1.1%.

5 **36. Q. How does PECO's customer service performance compare to other utilities?**

6 A. As noted in my previous answer, the PECO customer experience, as measured by
7 J.D. Power, has improved from a score of 748 in 2019 to 760 in 2021. PECO's
8 customer service ranking among comparative utility companies is currently 6th out
9 of 12 in 2021.

10 **37. Q. Does PECO have any plans to further enhance customer services?**

11 A. Yes. PECO is continuously working to improve the customer experience as well
12 as working to engage customers digitally if they so choose. New initiatives to
13 enhance customer service include:

- 14 • For 2022 and beyond, the Company has reprioritized an operational metric to
15 track FCR to place a greater focus across the organization on providing a
16 better experience to our customers. This metric will initially focus on the
17 customer experience through calls and then expand to include other customer
18 channels, such as IVR and web, in 2023 and beyond.

- 1 • PECO has started the installation of a new system called Customer Care and
2 Billing (“CC&B”), which will be used to manage customer interactions. This
3 initiative will aim to improve customer interaction in areas such as billing,
4 collections, and account errors. The installation of CC&B is expected to be
5 complete by 2023.

- 6 • The PECO website is currently undergoing a redesign to allow for users to
7 select to view the website in either Spanish or Simplified Chinese.

- 8 • PECO remains committed to identifying opportunities to minimize
9 interruption of gas service to customers and is currently piloting the Mueller
10 Direct Bag System which allows the Company to perform gas main and
11 service replacement work while keeping customers’ service active.

- 12 • PECO is also piloting the use of automated messaging to customers about
13 entering customer homes and service interruptions.

- 14 • Finally, as described in detail by PECO witness Kelly Colarelli (PECO
15 Statement No. 10), the Company plans to enhance outreach to low-to
16 moderate-income customers about universal service programming as well as
17 increase funding for LIURP.

18 **38. Q. Please describe PECO’s efforts to support economic development and the**
19 **communities in which the Company provides energy.**

20 A. PECO has a dedicated Economic Development Team that works cooperatively
21 with local, regional and state economic development officials as well as

1 commercial and industrial real-estate professionals to assist businesses that are
2 considering locating or expanding in southeastern Pennsylvania. For example,
3 PECO's Economic Development Team provides information on natural gas
4 availability and costs to companies, developers and consultants as key inputs to
5 location decisions. The team also works on strategic infrastructure projects such
6 as enabling Kimberley Clark's new gas-fired cogeneration system to improve
7 plant competitiveness and help achieve corporate sustainability goals. On the
8 residential side, PECO's neighborhood gas pilot program extends natural gas
9 mains to serve communities where natural gas is not currently available.

10 Moreover, as I discussed earlier, PECO makes significant capital and
11 infrastructure investments in its service territory every year that create and
12 maintain thousands of jobs in the region. The Company also implements multiple
13 workforce development programs to train job seekers for career opportunities at
14 PECO.

- 15 • Each year, PECO recruits new natural gas apprentice mechanics to
16 complete the Company's intensive training program before joining
17 PECO's field force. In 2022, PECO will be conducting two sessions. The
18 field force represents PECO's front line and works to ensure safe and
19 reliable gas service for PECO customers across the region, and the
20 Company's training program develops the fundamental skills needed to
21 work safely on PECO's natural gas distribution system.

- 1 • PECO partners with Philadelphia Opportunities Industrialization Center
2 (“OIC”) in support of the Smart Energy Technical Training program
3 (“SETT”), which provides energy sector opportunities for the
4 unemployed and underemployed. PECO’s \$85,000 contribution to the
5 program supports training for job seekers interested in energy sector
6 careers and power skill training such as resume writing, financial literacy,
7 and test preparation for construction and skilled trades (“CAST”) tests.
- 8 • PECO has partnered with the Energy Coordinating Agency to provide job
9 seekers with hands-on instruction including meter and heater work and
10 equipment usage to help prepare job seekers for gas mechanic
11 apprenticeship.
- 12 • In October 2021, PECO offered a two-phase Helper Pre-Apprentice
13 program to job seekers and received 747 applications. After completing
14 13 weeks of Phase I rotation and instruction, 18 attendees of the Helper
15 Pre-Apprentice program moved to permanent departments in Gas,
16 Electric, and Transmission and Substations where they will receive
17 additional instruction and experience and will be prepared to apply for an
18 apprenticeship position. The Company will offer this program again in
19 Spring of 2022.

20 PECO has a strong commitment to diversity, both among its workforce and in the
21 communities it serves. For example, PECO has employed minority and women-
22 owned businesses, contractors and vendors in its communities and has business

1 relationships with local minority-owned banks. In addition, PECO started hosting
2 information sessions in 2021 on upcoming career opportunities and invites key
3 community partners to attend. During the sessions, PECO will discuss upcoming
4 entry-level position openings, present current employees to share their
5 experiences, describe required skill sets and provide an opportunity for attendees
6 to ask questions. The sessions have proven to be successful as the number of
7 diverse applicants has increased when compared to previous years.

8 In support of small businesses in the Philadelphia area, PECO has implemented a
9 Small Business Gas Grant Program. As of March 11, 2022, the Company has
10 awarded grants totaling \$123,500 to 247 approved small businesses. In light of
11 the success of this program, PECO is proposing to continue the program beyond
12 2022 with additional funding.

13 The Company's efforts in these areas have earned it additional recognition,
14 including recognition as the "Top Utility for Economic Development in the
15 Northeast" by Site Selection Magazine based on corporate project investment in
16 PECO's service territory and job creation figures. All these activities, along with
17 sponsorships, employee volunteer activities, and executive involvement on
18 outside nonprofit boards, reflect PECO's strong and continuing tradition of
19 community involvement.

20 **39. Q. Please describe PECO's efforts to promote environmental stewardship.**

21 A. PECO has a strong commitment to protecting and preserving the environment.
22 By converting more than 19,600 homes from traditional home heating fuels to

1 natural gas over the last 10 years, PECO has supported emissions reductions
2 equivalent to planting 2.5 million trees or not driving 262 million car miles. The
3 Company is also taking steps to reduce emissions from the distribution of natural
4 gas. First, PECO is a member of a consortium of North American natural gas
5 utilities focused on renewable natural gas and hydrogen blending with the goal of
6 decreasing greenhouse gas (“GHG”) emissions from natural gas distribution.
7 Second, PECO joined its Exelon sister utilities (Baltimore Gas & Electric and
8 Delmarva Power) in a collective commitment through the EPA’s Natural Gas
9 STAR Methane Challenge Program to replace older cast iron and steel piping
10 with plastic piping to reduce methane emissions. Third, PECO continues to seek
11 opportunities to reduce natural gas emissions via its operations. As mentioned
12 previously, PECO has commissioned the installation of two boil off compressors
13 and has also piloted the use of pneumatic powered vacuum technologies to reduce
14 gas emissions during transfer of gas from a retired main to an active main. PECO
15 has also developed a Gas Emissions Mitigation Program inclusive of a committee
16 which is focused on efforts to mitigate gas emissions. Finally, the Company has
17 successfully implemented natural gas EE&C programming for over a decade,
18 resulting in natural gas savings of approximately 367,000 MCF. PECO is
19 proposing enhancements to those programs in this proceeding.

20 PECO has been recognized for its efforts to promote environmental stewardship.
21 In 2021, PECO was designated as a “2021 Environmental Champion” in the
22 Cogent Utility Trusted Brand & Customer Engagement study. Additionally, the
23 Pennsylvania Environmental Council awarded its Innovation and Corporate

1 Sustainability Award to PECO in recognition of our Green Region Open Space
2 Program and PECO's overall commitment to environmental excellence,
3 leadership, and accomplishment. Throughout 2020 and 2021, PECO has been
4 awarded \$350,000 in Green Region grants that the Company has used to enhance
5 green space throughout their service territory. To date, fifteen PECO property
6 locations have been certified by the National Wildlife Federation. Further, seven
7 PECO locations, comprising over 3,600 acres, have become certified as meeting
8 Wildlife Habitat Council standards.

9 **40. Q. Mr. Bradley, based on the factors you discussed above, how do you**
10 **characterize PECO's record with regard to the performance factor**
11 **considerations of efficiency, effectiveness and adequacy of service identified**
12 **in Section 523 of the Public Utility Code?**

13 A. My assessment is based on PECO's demonstrated excellence with regard to the
14 quality and reliability of its service, its commitment to energy efficiency, its
15 willingness to embrace cost-effective new technologies, its vigilance in protecting
16 the safety of its workers, and its strong promotion of community and economic
17 development, all of which I have discussed above. It is also based on PECO's
18 significant and successful efforts to manage and control its operating expenses
19 since its last base rate case in 2020, as discussed by Mr. Stefani in PECO
20 Statement No. 2. Based on all of those factors, PECO has exhibited, and
21 continues to exhibit, superior management performance, which fully supports Mr.
22 Moul's recommendation that PECO receive an ROE enhancement.

IX. CONCLUSION

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41. Q. Does this complete your direct testimony at this time?

A. Yes, it does.

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